

Federal Communications Commission
445 12th Street, NW
Washington, DC 20554

RE: LightSquared GPS Interference

It has come to my attention that a debate over the proposed spectrum use by Lightsquared will cause critical interference to the accuracy of existing GPS receivers. As a pilot and, one who flies commercially fairly often, I am concerned about the Commission's decision that would allow for such interference, since regulating and prevention of interference by standards, rules and regulations is a primary objective of the existence of the FCC.

In a letter to The Honorable Julius Genachowski from Javad Ashjaee, Ph.D. CEO and President of JAVAD GNSS, he claims that the standards of which the GPS receivers are designed are at fault and a suitable filter can be added to improve if not eliminate the effects of the interference. His letter goes on to say that he has proven interference of GPS receivers from standard FM radio stations on 92.7, 98.5, and 105 MHz. While 105 is not an accurate frequency for a U.S. based radio station, I accept his findings to a limited degree. He excludes the number of and types of GPS systems he tested. His findings are not stated in a technically supported manner and we're left to assume they are primarily consumer brand receivers. But the spirit of what he unveils in his letter cannot be overlooked, that is, standards that are/were/have been applied to the manufacturing of so many GPS devices currently in use.

The Commission has long stated that it does not set standards, but merely regulates the airwaves with rules and policies. It is through the standards set by others that are developed from the technological abilities that the Commission is allowed to make policies and rules. In this particular case, the standards of design by the manufacturers should be used as a guiding force to the decision of LightSquareds proposed use of the spectrum. If Dr. Ashjaee's findings are true that better filtering can be applied to receivers, the Commission must recognize the time and costs to implement such changes and the impact that it will have overall. As with the digital radio implementation, there are much better ways to implement the technology, given the spectrum to do so. The adaptation of what we currently have has been based on years of testing and improved technology, but it is still subpar to the primary operations of its analog methods and all digital implementation must be done on a non-interfering basis. The same must hold true with regard to LightSquareds use of the spectrum. While the AM/FM radio service doesn't provide critical service, GPS does and for many services all over the world, not only in the United States. The Commission must be reasonable and practical to its allocation of spectrum and provide protection to existing services, as it has long done.

The FCC must make clear, and the NTIA must ensure, that LightSquared's license modification is contingent on the outcome of the mandated study unequivocally demonstrating that there is no interference to GPS. The study must be comprehensive, objective, and based on correct assumptions about existing GPS uses rather than theoretical possibilities. Given the substantial pre-existing investment in GPS systems and infrastructure, and the critical nature of GPS applications, the results of studies must conclusively demonstrate that there is no risk of interference. If there is conflicting evidence, doubts must be resolved against the LightSquared terrestrial system. The views of LightSquared, as an interested party, are entitled to no special weight in this process.

Resolution of interference has to be the obligation of LightSquared, not the extensive GPS user community of millions of citizens. LightSquared must bear the costs of preventing interference emanating from their devices, and if there is no way to prevent interference, it should not be permitted to operate. GPS users or providers should not have to bear any of the consequences of LightSquared's actions. This has long been the practice with regard to new or modification to broadcast radio stations and should also be applied to LightSquared.

Our GPS operations are of great importance to much of the U.S. industry, from private use to public safety. It has become a vital tool to providing much increased safety to flying and systems are currently being implemented to assist pilots flying in the most adverse conditions. More developments are soon to hit the marketplace and as both a pilot and one who on the ground would like to remain safe from other aviation mishaps, I believe it is of the utmost importance the Commission is 100% assured that its allowance of LightSquared's utilization have no negative impact to the existing GPS operations.

Sincerely,
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